1. An apparatus for arraying particles, the apparatus comprising:

a) a substrate comprising an array of electrodes;

b) a counter-electrode plate substantially parallel to the array of electrodes; and

c) a fluid inlet for permitting a particle-containing fluid to flow between the array of electrodes and the counter-electrode plate.

2. The apparatus of claim 1, wherein the apparatus further comprises a voltage source for applying a voltage between the array of electrodes and the counter-electrode.

3. The apparatus of claim 2, wherein the voltage source provides a voltage of not greater than about 100 volts/mm.

4. The apparatus of claim 1, wherein the substrate comprises at least one cell-adhesive region and at least one non-cell-adhesive region.

5. The apparatus of claim 1, wherein the cell adhesive region comprises a layer of fibronectin or collagen.

6. The apparatus of claim 1, further comprising a fluid outlet.

7. The apparatus of claim 1, wherein the electrode array comprises at least 50 electrodes.

8. The apparatus of claim 1, wherein the electrode array comprises at least 100 electrodes.

9. The apparatus of claim 1, wherein each electrode of the electrode array is less

than 100 microns in diameter.

10. The apparatus of claim 1, wherein each electrode can be energized independently.

11 A method for arraying particles on a surface, the method comprising:

a) providing an apparatus comprising:

i) a substrate comprising an array of electrodes;

ii) a counter-electrode plate substantially parallel to the array of electrodes;

iii) a fluid inlet for permitting a flow of particle-containing fluid between the array of electrodes and the counter-electrode plate;

b) flowing a particle-containing fluid between the array of electrodes and the counter-electrode plate; and

c) subjecting the fluid to an electric field by applying an electric potential to the array of electrodes under conditions such that particles in the fluid are arrayed on a surface of the substrate.

12. The method of claim 11, wherein the particles are cells.

13. The method of claim 12, wherein the substrate comprises at least one cell-adhesive region and at least one non-cell-adhesive region.

14. The method of claim 13, wherein the cell adhesive region comprises a layer of fibronectin or collagen.